UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,747	10/10/2001	Paul C. Dingman	021857.000007	8203

			EXAMINER	
7590	01/20/2004		EL HADY, NABIL M	

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ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on th   cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 October 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

1.   Claims 1-20 are pending in this application.

2.   The listing of references in the specification is not a proper information disclosure

statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information

submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be

incorporated into the specification but must be submitted in a separate paper." Therefore,

unless the references have been cited by the examiner on form PTO-892, they have not been

considered.

3.   The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent
possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29
USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In
re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164
USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
        A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to
overcome an actual or provisional rejection based on a nonstatutory double patenting ground
provided the conflicting application or patent is shown to be commonly owned with this
application. See 37 CFR 1.130(b).
        Effective January 1, 1994, a registered attorney or agent of record may sign a terminal
disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37
CFR 3.73(b).

4.   Claims 1 and 3-20 are provisionally rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over claims 31-49 of copending

Application No. 09/652,473, hereafter "473". Although the conflicting claims are not identical,

they are not patentably distinct from each other because the only difference between the two

systems is naming of the write spokes as modeless in the instant application, which is clearly

obvious from the functionality of the system.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting

claims have not in fact been patented.

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1, and 3-18 are rejected under 35 U.S.C. 102(e) as being anticipated by

Cantone et al. (US 6,351,761), hereafter "Cantone".

7.   As to claim 1, Cantone discloses a system for data transformation (Fig. 4A), comprising:

one or more read spokes, each read spoke configured to connect to one or more data sources

(101, Fig. 4A; col. 5, lines 52-57), one or more modeless write spokes, each write spoke

configured to connect to one or more data targets (101', Fig. 4A; col. 7, line 65 to col. 8, line 10);

and a transformation engine operatively coupled to the one or more read spokes for retrieving

data from the one or more data sources and coupled to the one or more write spokes for storing

data in the one or more data targets (102', Fig. 4A), comprising: a data transformation map that

relates one or more source structures to one or more target structures (130, Fig. 4A; 338, Fig.

3B; and Fig. 2D); an event list comprising one or more event actions, each with a corresponding

triggering event (108, 122, Fig. 1; and Fig. 4A).

8.   As to claim 3, Cantone discloses a transformation event action, comprises: retrieving at

least one source structure from the data source, transforming said at least one source structure,

referred to as transformed source data, and storing said transformed source data in one or more

target structures; and wherein said transformation engine is operable, in response to a

transformation event action, transform data specified by said transformation event action in a

manner described in the data transformation map (108, 122, Fig. 1; and Fig. 4A; col. 4, lines 9-

16; and col. 11, lines 24-35).

9.   As to claims 4-10, Cantone discloses a user interface configured to allow a user to

define the one or more data sources, and to define data structures in each of the one or more

source databases, to allow a user to define the one or more data targets, and to define data

structures in each of the one or more target databases, and to allow a user to define the

relationship between one or more data sources and one or more data targets (as a logical

expression, as a numeric expression) ,wherein the user interface is further comprises a display

configured to graphically depict the relation between the source structures and the target

structures specified in the transformation map (inherent in col. 2, line 63 to col. 3, line 1; col. 10,

lines 20-29).

10.   As to claim 11, Cantone discloses a display configured to show the contents of the data

source and the contents of data structures in the data target (inherent in col. 10, lines 20-29).

11.   As to claims 12-15, Cantone discloses the associated triggering event is a generic

source event, a generic target event, a generic transformation event, a specific source record

event (inherent in 108, 122, Fig. 1; Fig. 4A; col. 4, lines 9-16; and col. 11, lines 24-35).

12.   As to claims 16-18, Cantone discloses specifying filtering criteria for the data source,

and iterating through only that data in the data source that meets the filtering criteria, wherein

the data is filtered using predetermined sampling parameters governing a range or sample, or

using a predetermined logical extraction criteria (inherent in col. 12, lines 4-14)

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a
> whole would have been obvious at the time the invention was made to a person having
> ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

14.   Claims 2, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cantone et al. (US 6,351,761), hereafter "Cantone".

15.   As to claim 2, Cantone does not specifically disclose a query language preprocessor.

However, it is well known in the art that a query language provides a user interface to database

management systems and it is often embedded in other programming languages (see, for

example the specification, page 8, lines 28-31). It would be obvious to one skilled in the art at

the time of the invention that the transformation engine would comprise a query language

preprocessor to perform the functions of the transformation engine in reviewing the data transformation map and evaluating embedded expressions in the one or more mapping.

16.   As to claims 19 and 20, Cantone does not explicitly disclose the read spokes connect to the one or more data sources by utilizing a raw sequential mode wherein an intuitive visual parser reconstructs record layouts, or by utilizing a compatible physical file format allowing the transformation engine to physically read from the one or more data sources using the native internal storage format. Official notice is taken that both methods are used in the prior art to connect read spokes to the one or more data sources, and the method used is basically a matter of design choice.

17.   Claims 1-20 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art, hereafter "AAPA" in view of Morgenstern (US 5,970,490).

18..   Morgenstern is cited by the applicant in IDS paper No. 6.

19.   As to claim 1, AAPA discloses in page 12, lines 23-29 that "a typical prior art technique used by many of the data transformation and data loading utilities is a three step process that includes reading a record, evaluating a mapping to move the source field of data to the target fields, and writing the record to the target. This process is repeated for each record in the data source". AAPA also discloses in page 4, lines 19-31 that "the use of an iterative method addresses this last concern, iterative data transformation methods do not require the use of large amounts of memory that loading the entire structure requires, because source data is examined one record at a time".

20.   AAPA's disclosure represents a system for data transformation (the data

transformation and data loading utilities), comprising: one or more read spokes, each configured

to connect to one or more data sources (for reading a record), one or more modeless write

spokes, each configured to connect to one or more data targets (for writing the record to the

target); and a transformation engine operatively coupled to the one or more read spokes for

retrieving data from the one or more data sources and coupled to the one or more write spokes

for storing data in the one or more data targets (to perform the three step process that includes

reading a record, evaluating a mapping to move the source field of data to the target fields, and

writing the record to the target), the transformation engine comprising: a data transformation

map that relates one or more source structures to one or more target structures (evaluating a

mapping), and is configured to iterate through the data source (using iterative data

transformation methods).

21.   AAPA does not explicitly disclose an event list comprising one or more event actions,

each with a corresponding triggering event, the triggering events to be detected in the iteration

process. Morgenstern, on the other hand, discloses an event list comprising one or more event

actions, each with a corresponding triggering event, the triggering events to be detected in the

iteration process (col. 15, lines 1-28, 42-43, 56-58; and col. 22, lines 1-6, 33-39). It would have

been obvious to one skilled in the art at the time of the invention to combine the teachings of

AAPA and Morgenstern because Morgenstern's use of event list with triggering events would

allow for highly generalized technology which can be applied to a wide variety of situations and

be able to tailor and/or create the necessary transformations, programs for data access and

software interfaces (see, Morgenstern, col. 5, lines 5-21).

22.   As to claim 2, AAPA discloses that query language is known to provide a user interface

to database management systems and it is often embedded in other programming languages

(page 8, lines 28-31). It is inherent in this disclosure that the transformation engine would

comprise a query language preprocessor to perform the functions of the transformation engine

in reviewing the data transformation map and evaluating embedded expressions in the one or

more mapping. It is also inherent in Morgenstern's disclosure the use of a query language

preprocessor to perform the functions of the transformation engine in reviewing the data

transformation map and evaluating embedded expressions in the one or more mapping (col. 3,

lines 14-22; and col. 29, lines 7-13).

23.   As to claim 3, the claim is rejected for the same reasons as claim 1 above. In addition,

Morgenstern discloses a transformation event action, comprises: retrieving at least one source

structure from the data source, transforming said at least one source structure, referred to as

transformed source data, and storing said transformed source data in one or more target

structures; and wherein said transformation engine is operable, in response to a transformation

event action, transform data specified by said transformation event action in a manner

described in the data transformation map (col. 15, lines 1-28, 42-43, 56-58; and col. 22, lines 1-

6, 33-39).

24.   As to claims 4-10, AAPA does not disclose a detailed function of a user interface. Official

notice is taken that the both the concept and advantages of providing a user interface to allow a

user to define the one or more data sources, and to define data structures in each of the one or

more source databases, to allow a user to define the one or more data targets, and to define

data structures in each of the one or more target databases, and to allow a user to define the
relationship between one or more data sources and one or more data targets (as a logical
expression, as a numeric expression) ,wherein the user interface is further comprises a display
configured to graphically depict the relation between the source structures and the target
structures specified in the transformation map; is well known and expected in the art. It would
have been obvious to one skilled in the art at the time of the invention to provide such
functionalities to a user interface in order to allow a user to fully manage the transformation
system (see, for example, Morgenstern, 8, 10, 14 of Fig. 1; Motoyama et al., US 6,085,196,
abstract; and Martin et al., US 6,035,307; 222 of Fig. 3, all are cited by the applicant in IDS
paper No. 6).

25.   As to claim 11, Morgenstern discloses a display configured to show the contents of the
data source and the contents of data structures in the data target (10, Fig. 1).

26.   As to claims 12-15, Morgenstern discloses the associated triggering event is a generic
source event, a generic target event, a generic transformation event, a specific source record
event (inherent in col. 15, lines 1-28, 42-43, 56-58 and col. 22, lines 1-6, 33-39)

27.   As to claims 16-18, Morgenstern discloses specifying filtering criteria for the data source,
and iterating through only that data in the data source that meets the filtering criteria, wherein
the data is filtered using predetermined sampling parameters governing a range or sample, or
using a predetermined logical extraction criteria (inherent in col. 15, lines 31-34).

28.   As to claim 19, Morgenstern discloses the read spokes connect to the one or more data sources by utilizing a raw sequential mode wherein an intuitive visual parser reconstructs record layouts (col. 8, lines 9-15).

29.   As to claim 20, AAPA and Morgenstern do not explicitly disclose the read spokes connect to the one or more data sources by utilizing a compatible physical file format allowing the transformation engine to physically read from the one or more data sources using the native internal storage format. Official notice is taken that such method is used in the prior art to connect read spokes to the one or more data sources as a matter of design choice.

30.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (703) 308-7990. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai T An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Nabil El-Hady, Ph.D, M.B.A.
Primary Patent Examiner
January 9, 2004